

TOSHIBA Diode Silicon Epitaxial Schottky Planar Type

1SS349

Ultra High Speed Switching Application

Unit: mm

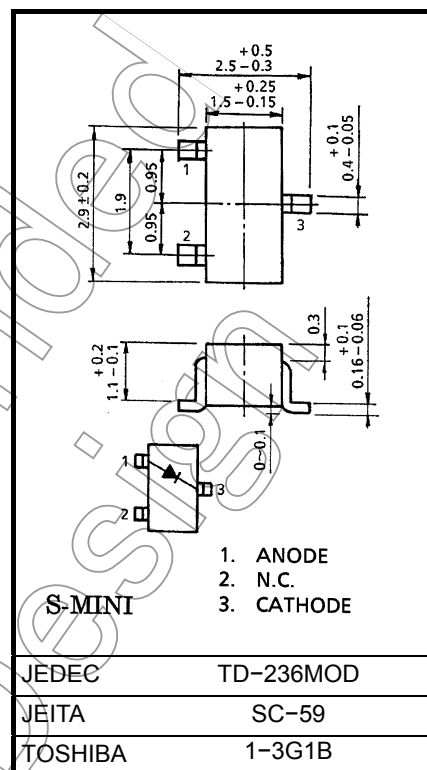
- Low forward voltage : $V_F(3) = 0.49V$ (typ.)
- Low reverse current : $I_R = 50\mu A$ (max)
- Small package : SC-59

Absolute Maximum Ratings (Ta = 25°C)

Characteristic	Symbol	Rating	Unit
Maximum (peak) reverse voltage	V_{RM}	25	V
Reverse voltage	V_R	20	V
Maximum (peak) forward current	I_{FM}	3000	mA
Average forward current	I_O	1000	mA
Power dissipation	P	200	mW
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-55~125	°C
Operating Temperature	T_{opr}	-40~100	°C

Note: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings.

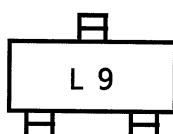
Please design the appropriate reliability upon reviewing the Toshiba Semiconductor Reliability Handbook ("Handling Precautions"/"Derating Concept and Methods") and individual reliability data (i.e. reliability test report and estimated failure rate, etc).

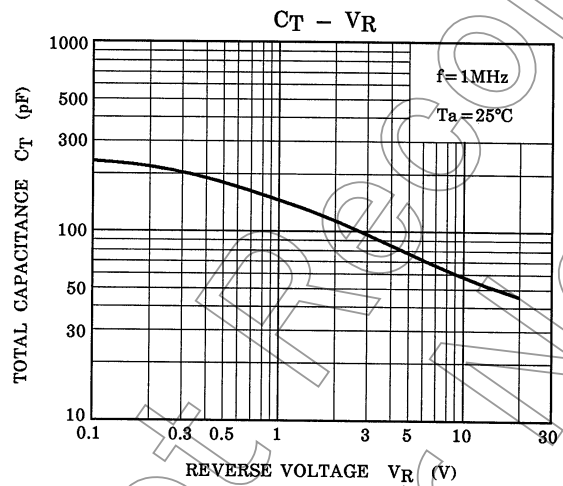
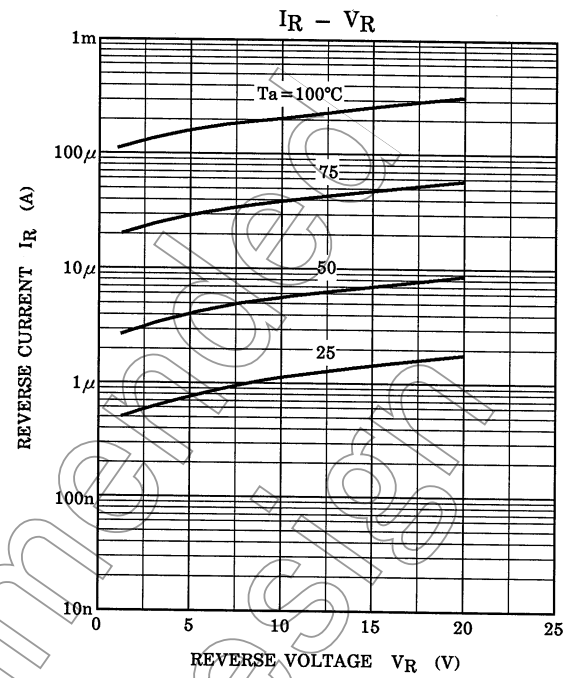
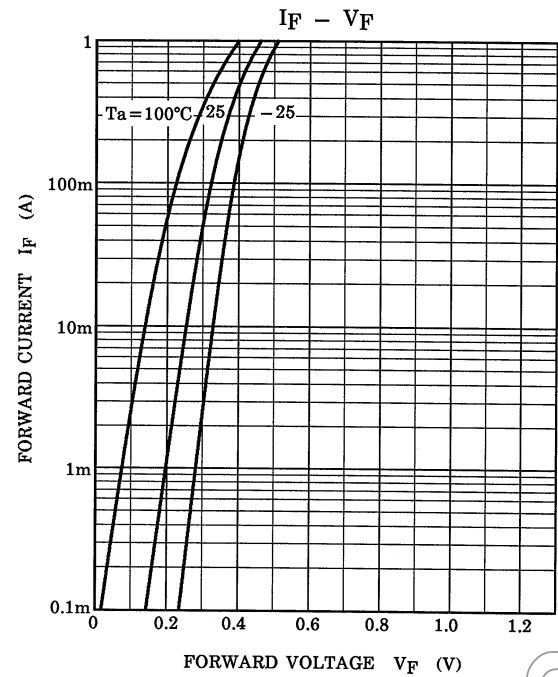


Electrical Characteristics (Ta = 25°C)

Characteristic	Symbol	Test Circuit	Test Condition	Min	Typ.	Max	Unit
Forward voltage	$V_F(1)$	—	$I_F = 100mA$	—	0.34	—	V
	$V_F(2)$	—	$I_F = 500mA$	—	0.42	—	
	$V_F(3)$	—	$I_F = 1000mA$	—	0.49	0.55	
Reverse current	$I_R(1)$	—	$V_R = 20V$	—	—	50	μA
Total capacitance	C_T	—	$V_R = 0, f = 1MHz$	—	250	—	pF

Marking





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